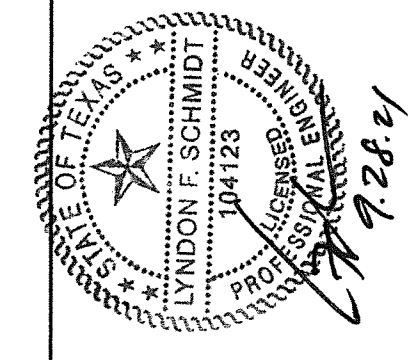


# THERMA-TRU® DOORS

Fiber-Classic® & Smooth-Star®

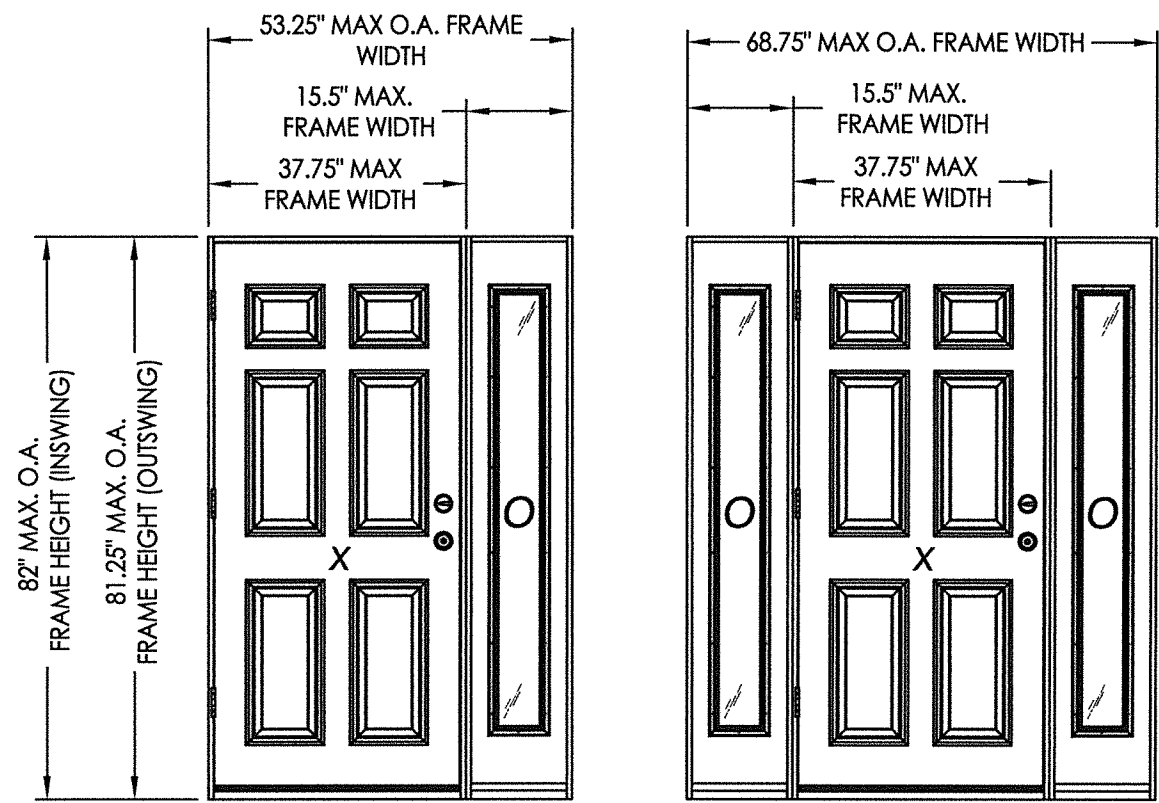


Documents Prepared By: Lyndon F. Schmidt, P.E.  
TEXAS P.E. #104123

**RW** BUILDING CONSULTANTS, INC.  
P.O. Box 230 Valrico FL 33595  
Phone No.: 813.659.9197

CERTIFICATE OF REGISTRATION # F-11852

## COMPOSITE EDGE OPAQUE FIBERGLASS SINGLE DOOR w/ SIDELITE(S) INSWING/OUTSWING "NON-IMPACT"



EVALUATED FOR USE IN THE STATE OF TEXAS **TDI DR-947**  
The Fiberglass Door system described herein complies with the 2018 International Residential Code (IRC), Sections R301 & R609 and the 2018 International Building Code (IBC), Sections 1404.13, 1609, 1709.5, 2403 and 2404 subject to the following conditions:

1. Anchors shall be as listed and spaced as shown in the details. Anchor embedment to base material shall be beyond wall dressing or stucco.
2. When used in areas requiring wind-borne debris protection this product is required to be protected with an impact resistant covering that complies with Section R301.2.1.2 of the IRC and Section 1609.1.2 of the IBC.
3. Allowable design pressure requirements must be equal to or less than the design pressure rating shown in the design pressure chart, sheet 1 of this drawing.
4. Conditions not covered by this drawing are subject to further engineering analysis.
5. Fiber-Classic and Smooth-Star Door and Sidelite panels require the use of "J" part numbers. These door and sidelite panels must be stained or painted within six months of installation.

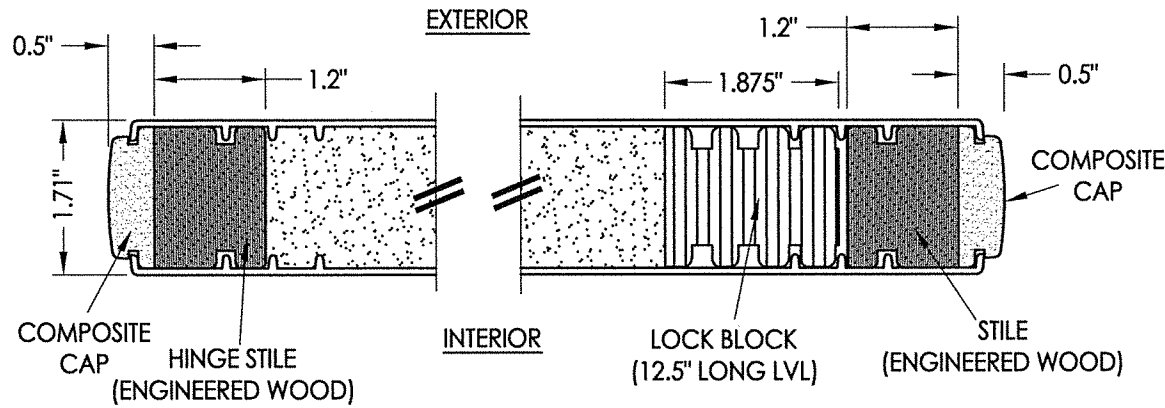
TABLE OF CONTENTS	
SHEET #	DESCRIPTION
1	Typical Elevations, Design Pressures & General Notes
2	Door Panel Details
3	Sidelite Panel Details
4	Elevations
5	Horizontal & Vertical Cross Sections
6	Vertical Cross Sections (Thresholds)
7	Frame Anchoring
8	Hardware Details
9	Glazing Details
10	Components
11	Bill of Materials

CONFIGURATION	DESIGN PRESSURE (PSF) INSWING		DESIGN PRESSURE (PSF) OUTSWING	
	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE
XO, OX, OXO	+45.0	-50.0	+45.0	-45.0

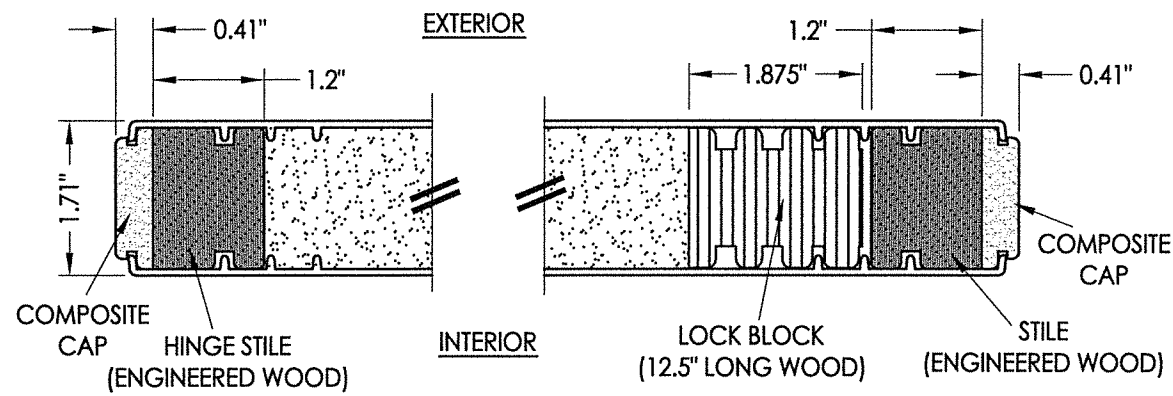
See Sheet 4 for Hardware Specifications

PRODUCT: THERMA-TRU FIBERGLASS DOOR	
PART OR ASSEMBLY: TYPICAL ELEVATION, DESIGN PRESSURES & GENERAL NOTES	
NO.	REVISIONS
1	9/28/21 UPDATE TO 2018 IBC/IRC CODE
LFS	BY
DATE: 11/14/17	
SCALE: N.T.S.	
DWG. BY: JK	
CHK. BY: LFS	
DRAWING NO.: TX-4717	
SHEET 1 OF 11	

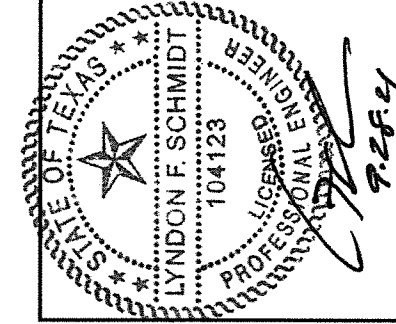
Z:\Clients\Therma Tru PERMANENT\B - Texas Dept of Ins\TDI - DR 947 - 6'8 & 8'0 Opaque Comp Edge Non-Impact (TX 4716 - 4727)\C - Drawings\TX-4716-18.dwg



**1**  
**2** **HORIZONTAL CROSS SECTION**



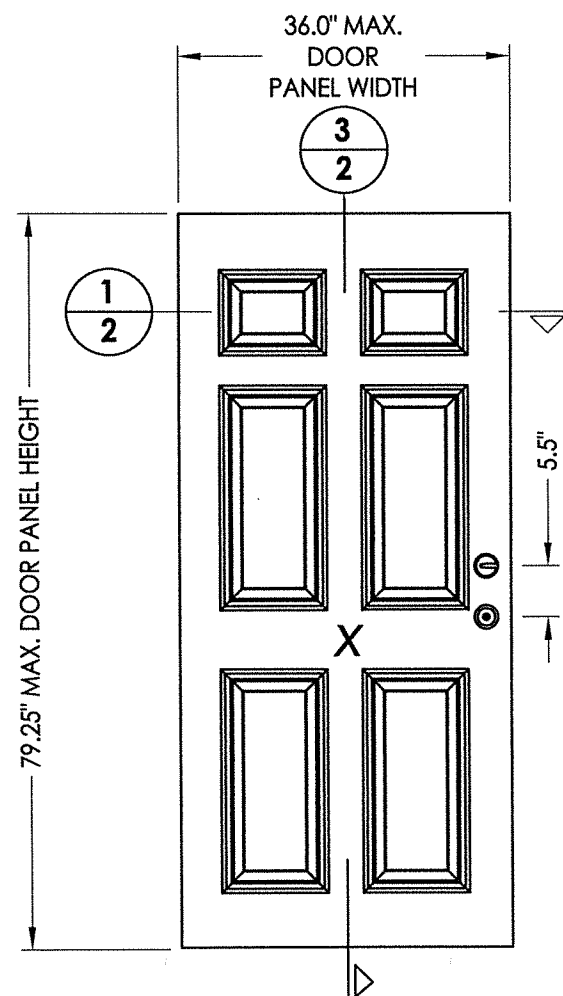
**2**  
**2** **HORIZONTAL CROSS SECTION**



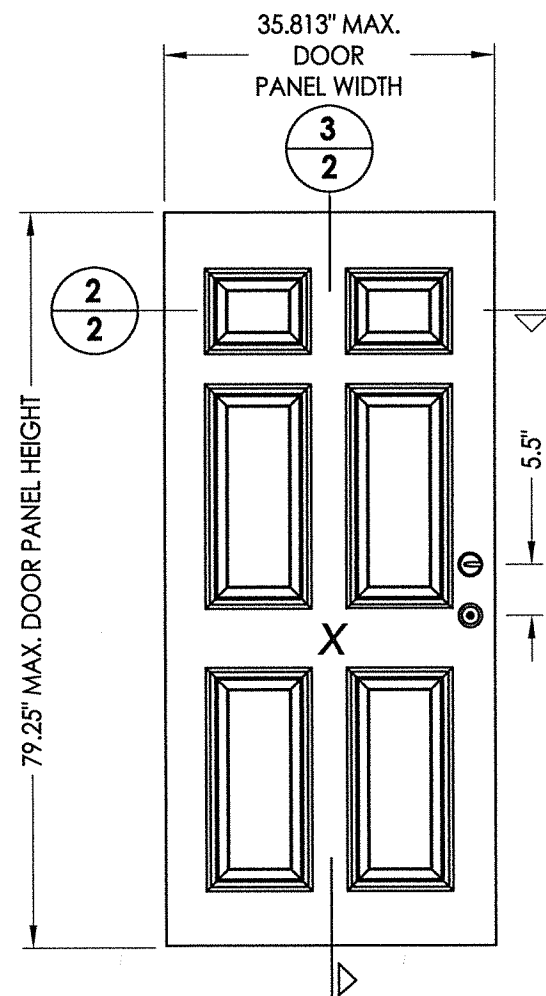
Documents Prepared By: Lyndon F. Schmidt, P.E.  
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Phone No.: 813.659.9197

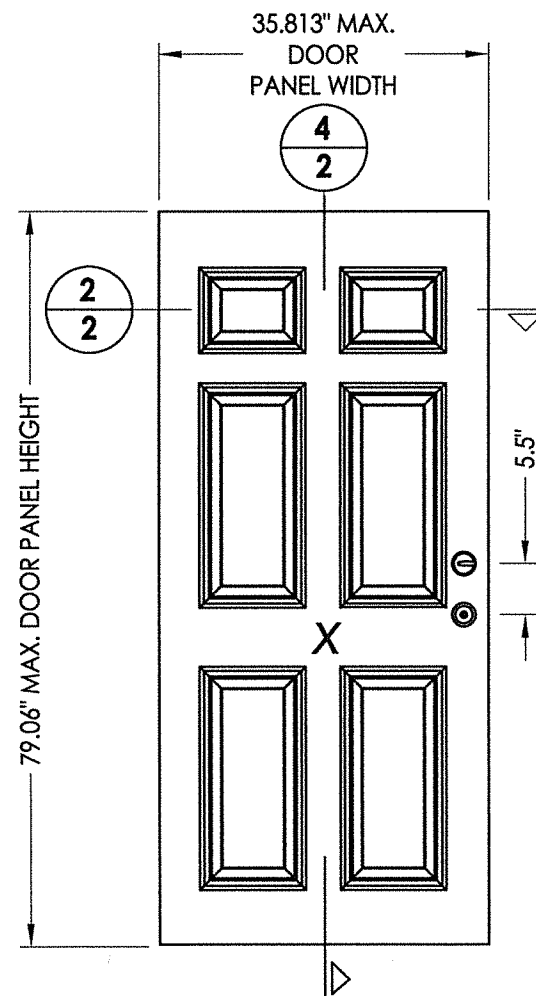
CERTIFICATE OF REGISTRATION # F-11852



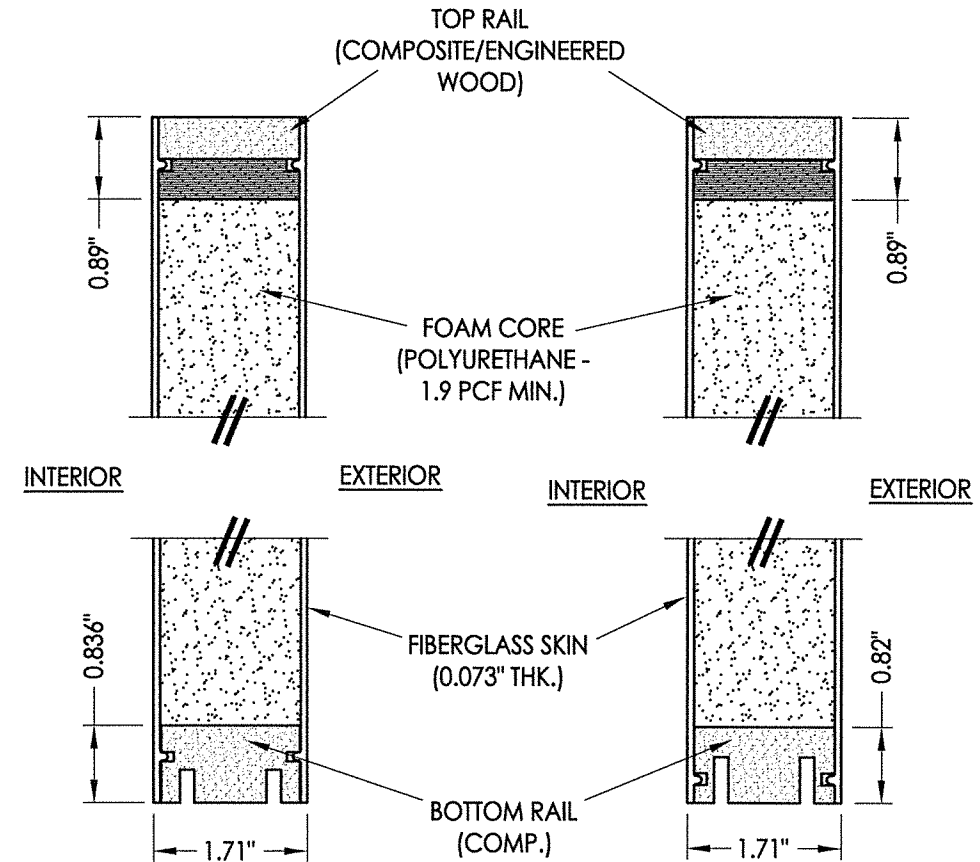
**40** **DOOR PANEL BOOK**



**41** **DOOR PANEL Hybrid Door**



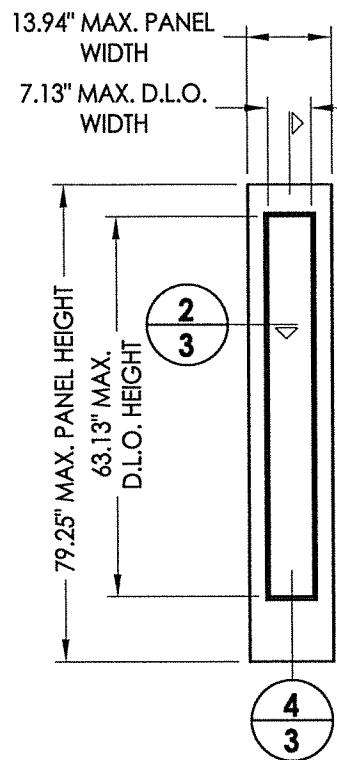
**42** **DOOR PANEL U1 Door**



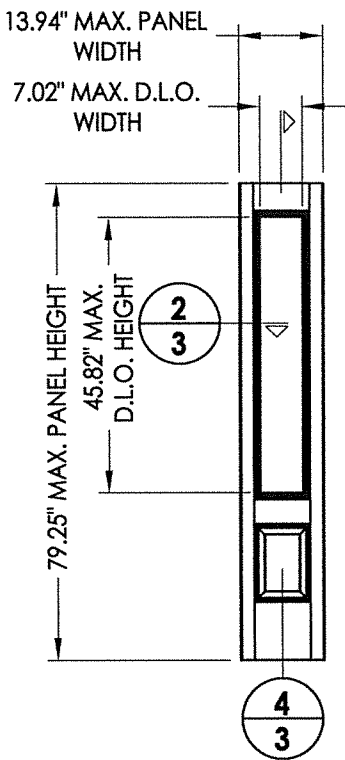
**3**  
**2** **VERTICAL CROSS SECTION**

**4**  
**2** **VERTICAL CROSS SECTION**

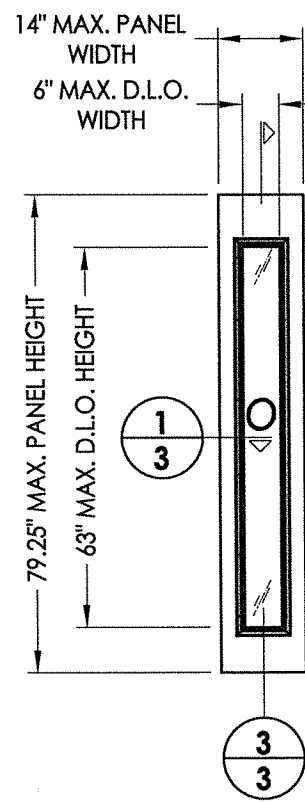
PRODUCT: THERMA-TRU FIBERGLASS DOOR	
PART OR ASSEMBLY: DOOR PANEL DETAILS	
NO.	DATE
1	9/28/21
UPDATE TO 2018 IBC/IRC CODE	
LFS	BY
REVISIONS	
DATE: 11/14/17	
SCALE: N.T.S.	
DWG. BY: JK	
CHK. BY: LFS	
DRAWING NO.: TX-4717	
SHEET 2 OF 11	



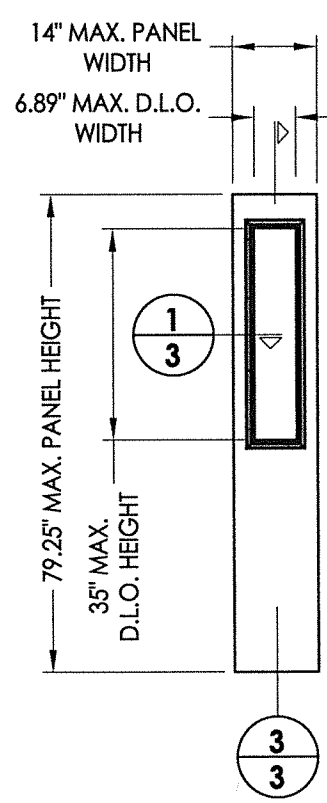
**60 SIDELITE PANEL**  
Full Lite  
Flush Glazed



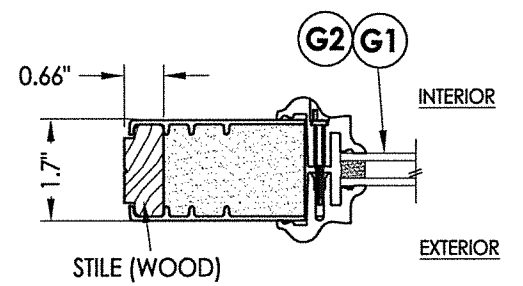
**60 SIDELITE PANEL**  
3/4 Lite  
Flush Glazed



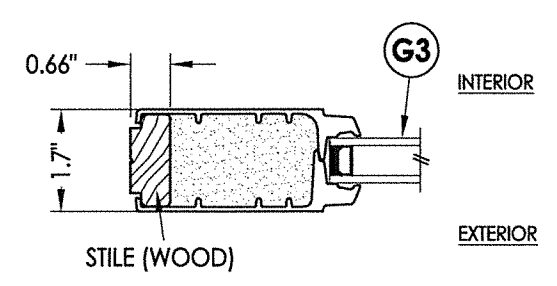
**50 SIDELITE PANEL**  
Full Lite  
Lip Lite



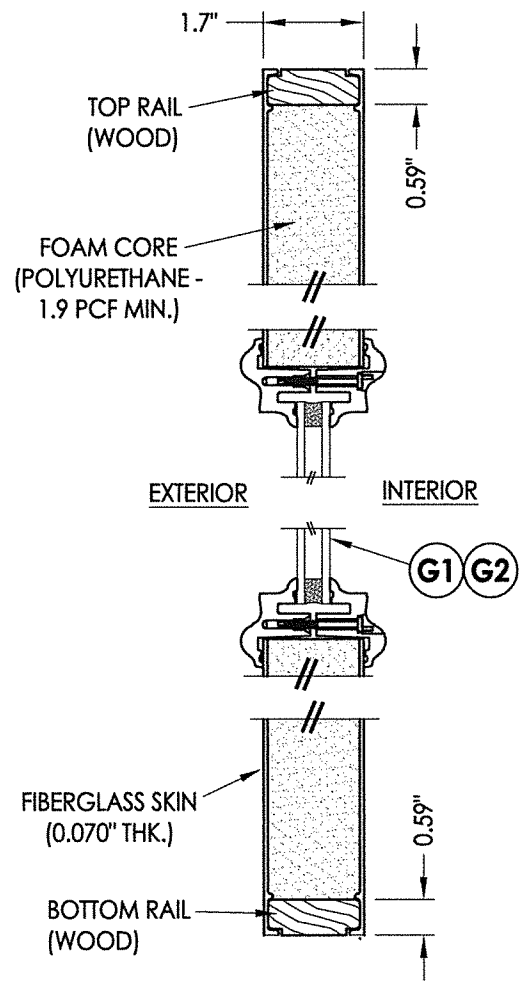
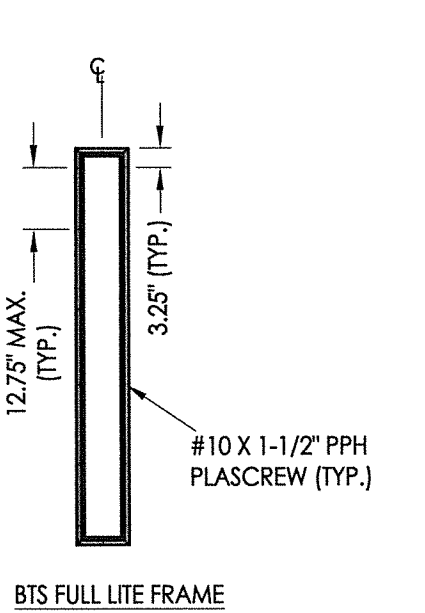
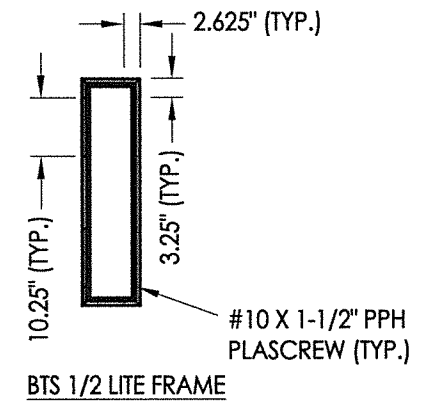
**50 SIDELITE PANEL**  
Half Lite  
Lip Lite



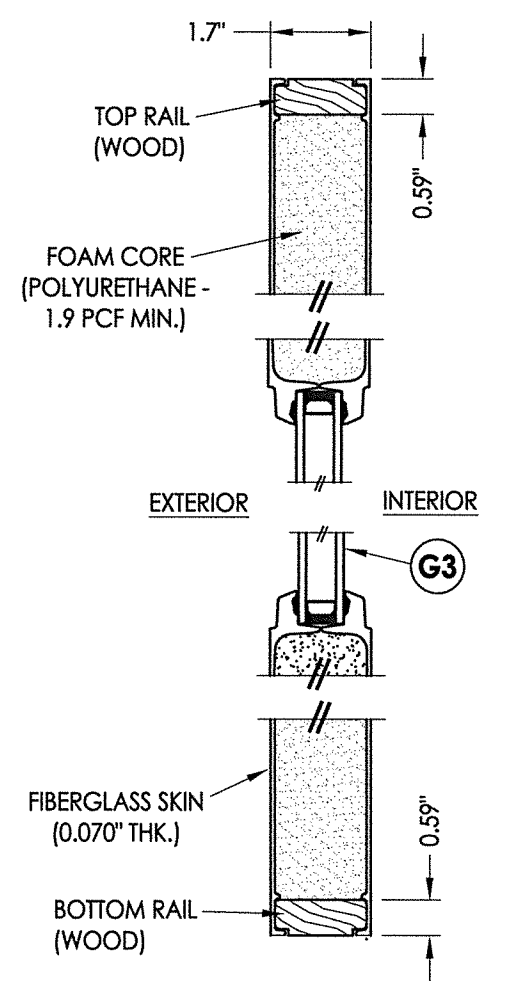
**1 HORIZONTAL CROSS SECTION**  
3 Lip Lite Glazing



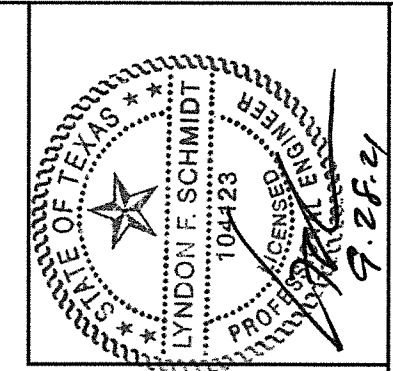
**2 HORIZONTAL CROSS SECTION**  
3 Flush Glazing



**3 VERTICAL CROSS SECTION**  
3 Lip Lite Glazing Shown



**4 VERTICAL CROSS SECTION**  
3 Flush Glazing Shown

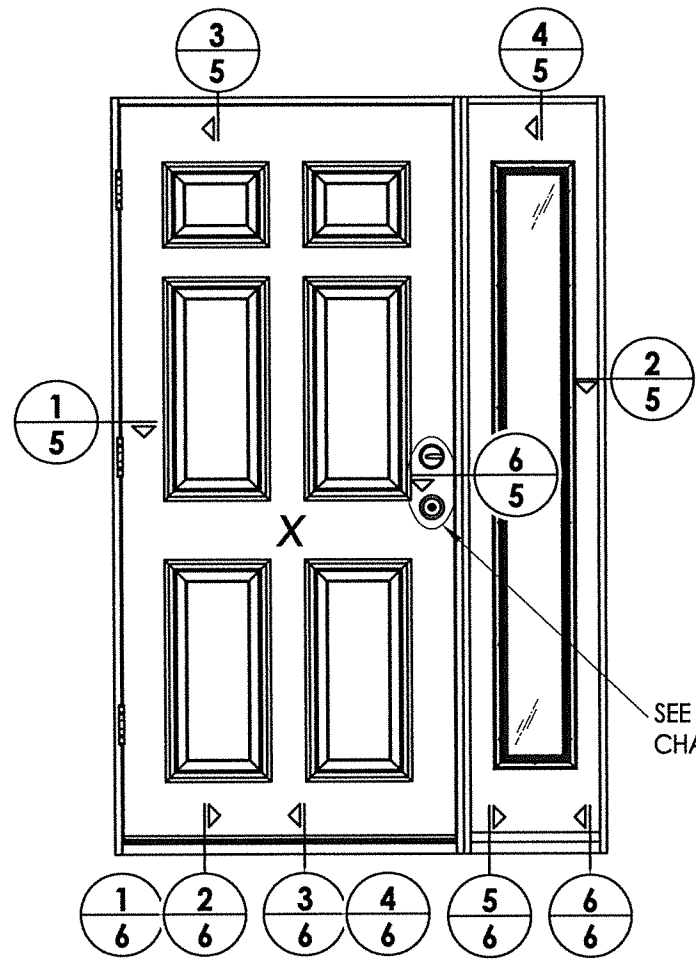


Documents Prepared By: Lyndon F. Schmidt, P.E.  
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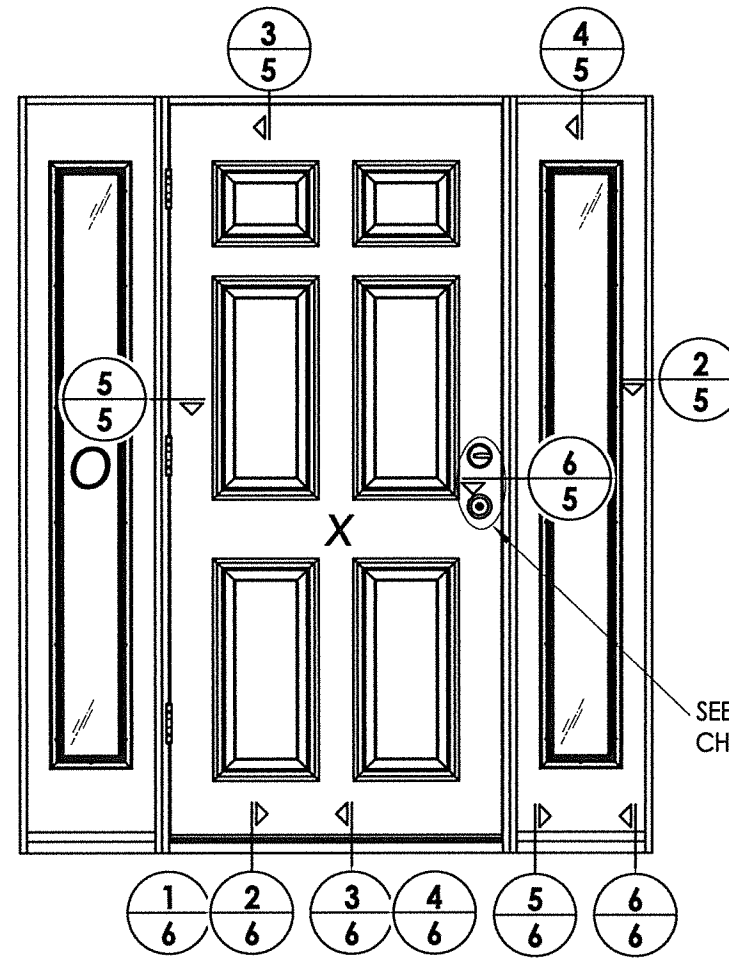
**RW** BUILDING CONSULTANTS, INC.  
P.O. Box 230 Valrico FL 33595  
Phone No.: 813.659.9197

CERTIFICATE OF REGISTRATION # F-11852

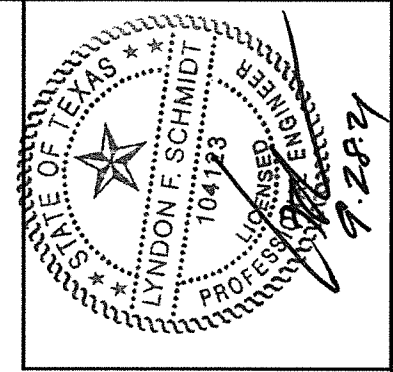
PRODUCT:		THERMA TRU FIBERGLASS DOOR	
PART OR ASSEMBLY:		SIDELITE PANEL DETAILS	
DATE:	11/14/17	SCALE:	N.T.S.
DWG. BY:	JK	CHK. BY:	LFS
DRAWING NO.:	TX-4717	NO. DATE	1 9/28/21
SHEET	3	OF	11
REVISIONS		LFS BY	



ELEVATION  
XO



ELEVATION  
OXO



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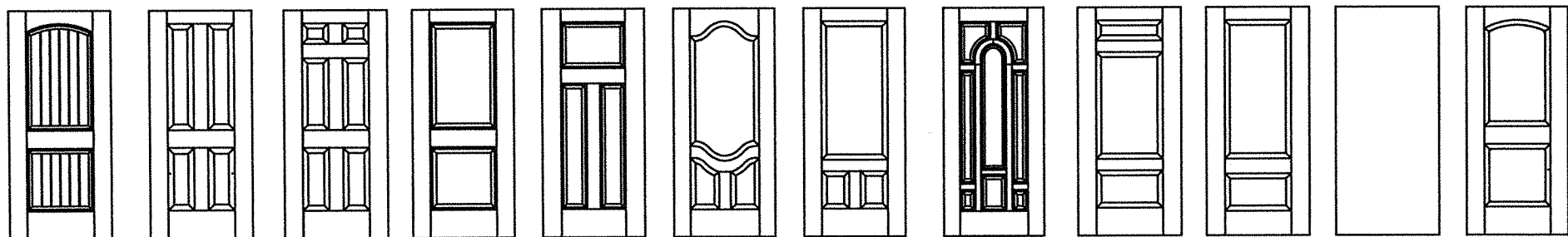
**RW** BUILDING CONSULTANTS, INC.  
P.O. Box 230 Valrico FL 33595  
Phone No.: 813.659.9197

CERTIFICATE OF REGISTRATION # F-11852

PRODUCT: THERMA-TRU FIBERGLASS DOOR  
PART OR ASSEMBLY: ELEVATIONS

REVISIONS	
NO.	DATE
1	9/28/21 UPDATE TO 2018 IBC/IRC CODE
	LFS
	BY

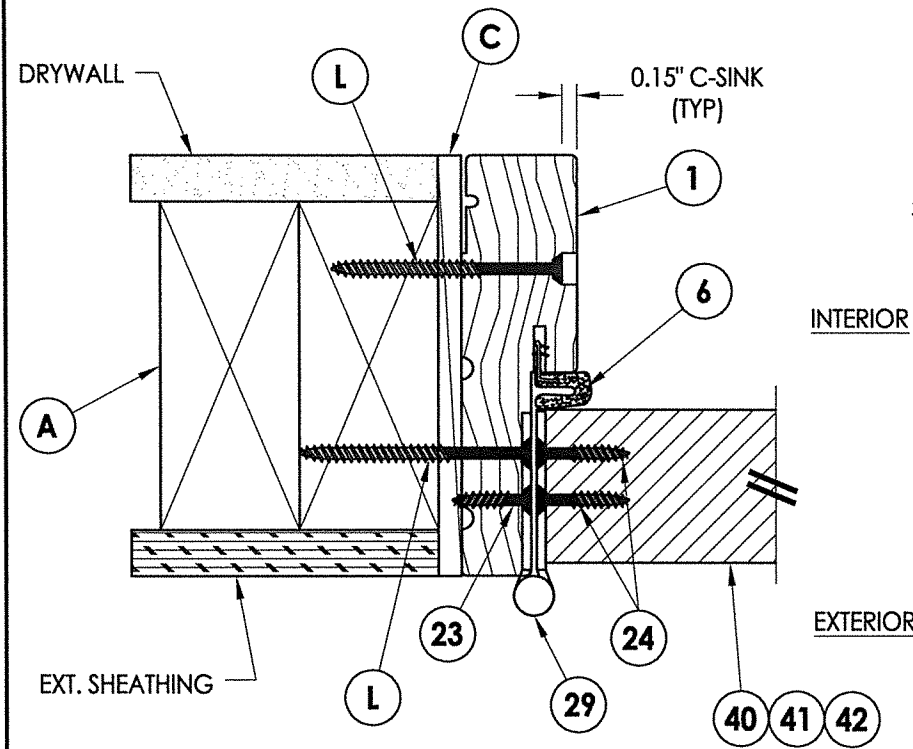
DATE: 11/14/17  
SCALE: N.T.S.  
DWG. BY: JK  
CHK. BY: LFS  
DRAWING NO.: TX-4717  
SHEET 4 OF 11



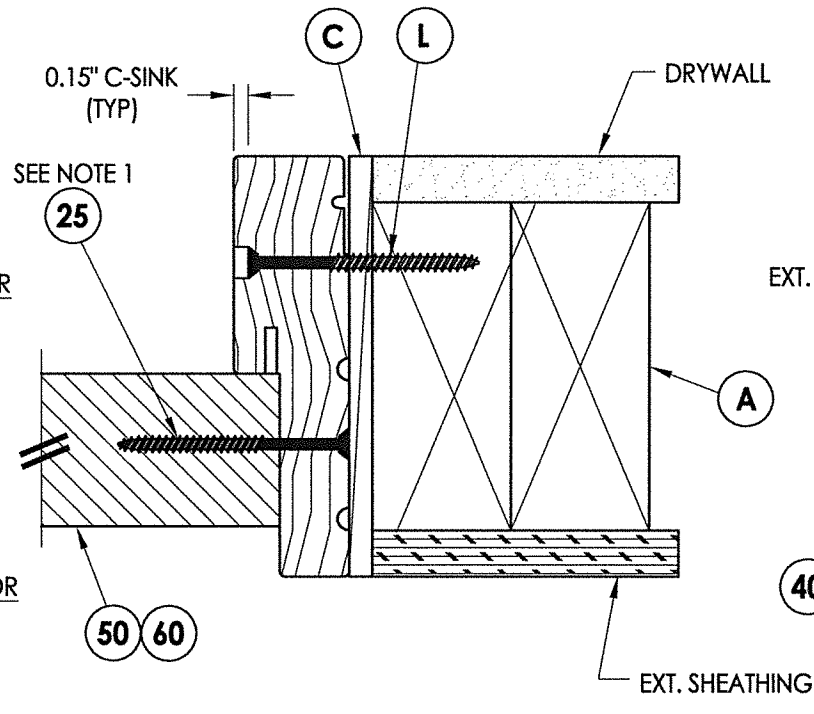
**Fiber-Classic/Smooth-Star Door Panel Options**  
Panel options shown are for illustration and are representative only  
(similar opaque panel configurations are allowed)

HARDWARE TABLE		
MANUFACTURER	MODEL	
SCHLAGE	KNOB:	F51
	DEADBOLT:	B60
KWIKSET	KNOB:	SIGNATURE SERIES
	DEADBOLT:	SIGNATURE SERIES (980)
HOPPE (THERMA-TRU)	MULTIPOINT : MPDGART (3 pt. Manual Tongue)	

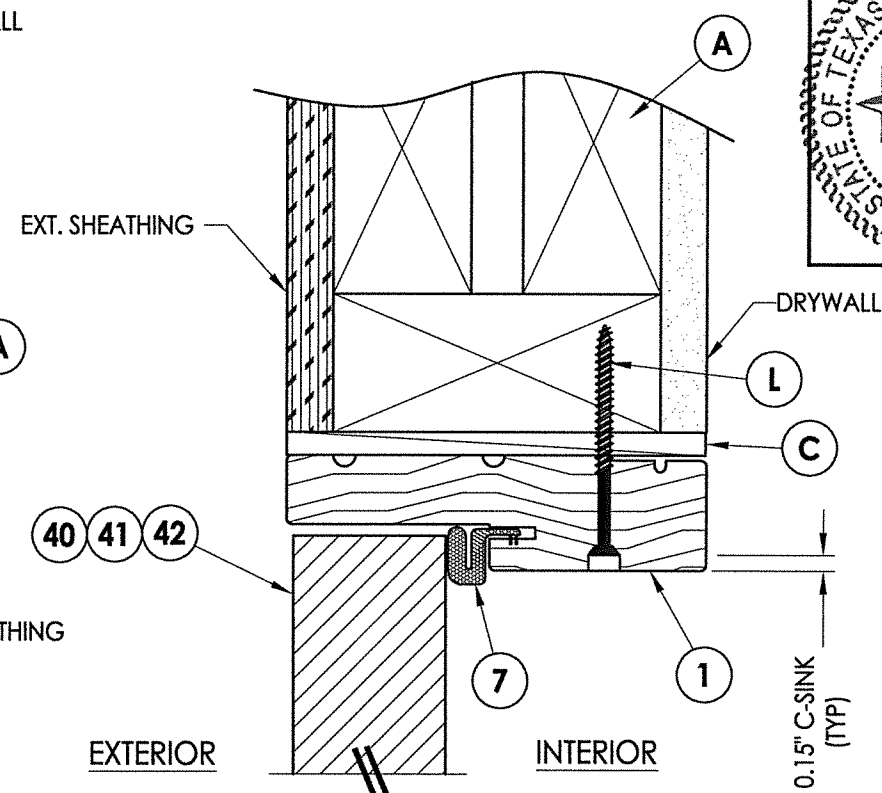
Z:\Clients\Therma Tru PERMANENT\B - Texas Dept of Ins\TDI - DR 947 - 6'8 & 8'0 Opaque Comp Edge Non-Impact\TX-4716 - 4727\C - Drawings\TX-4716-18.dwg



**1 HORIZONTAL CROSS SECTION**  
**5** Shown w/ 2X Buck  
 Outswing shown (Inswing similar)

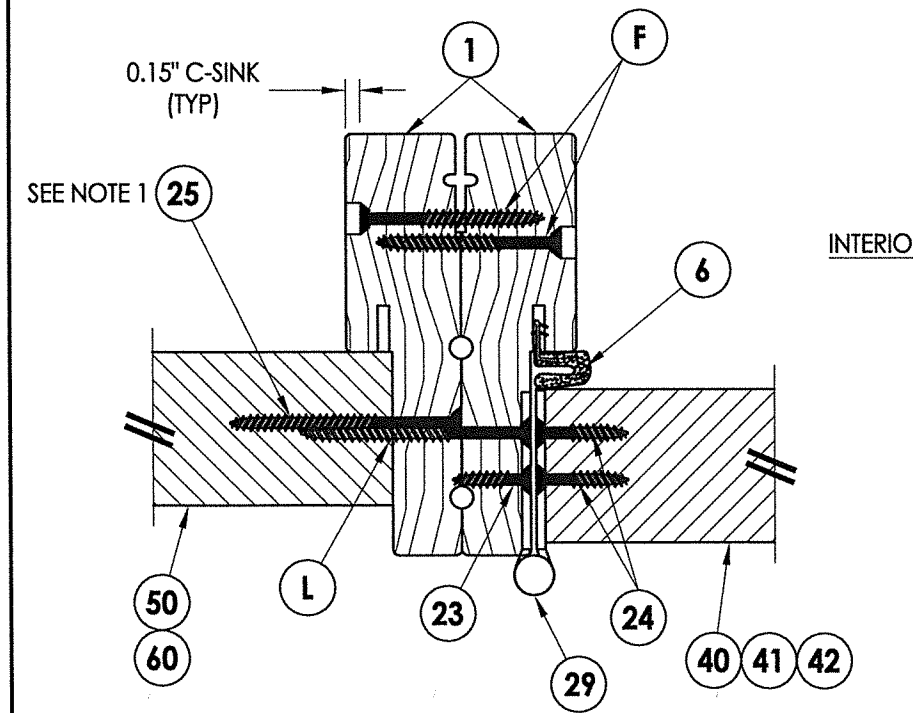


**2 HORIZONTAL CROSS SECTION**  
**5** Shown w/ 2X Buck  
 Outswing shown (Inswing similar)

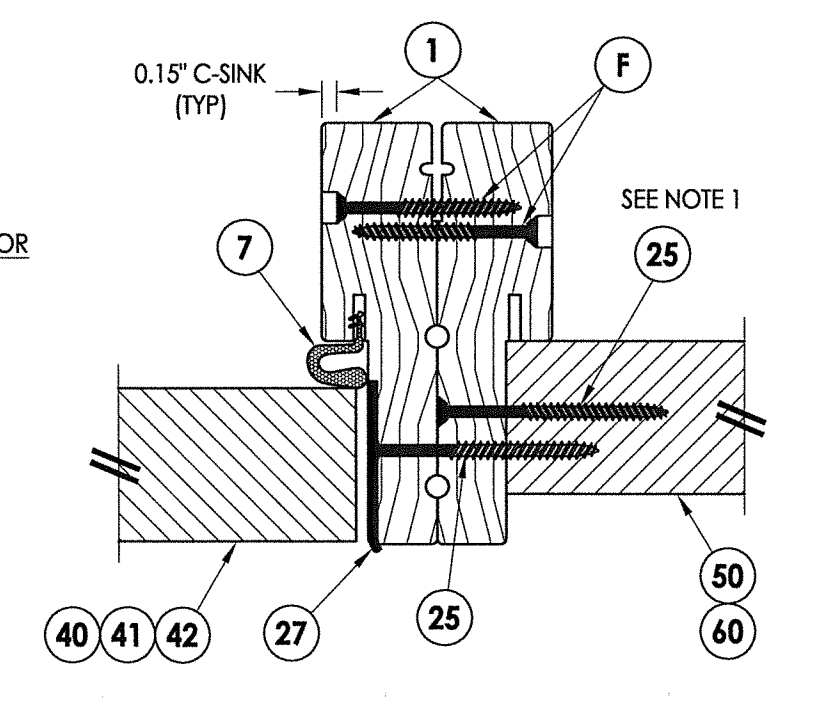


**3 VERTICAL CROSS SECTION**  
**5** Shown w/ 2X Buck  
 Outswing shown (Inswing similar)

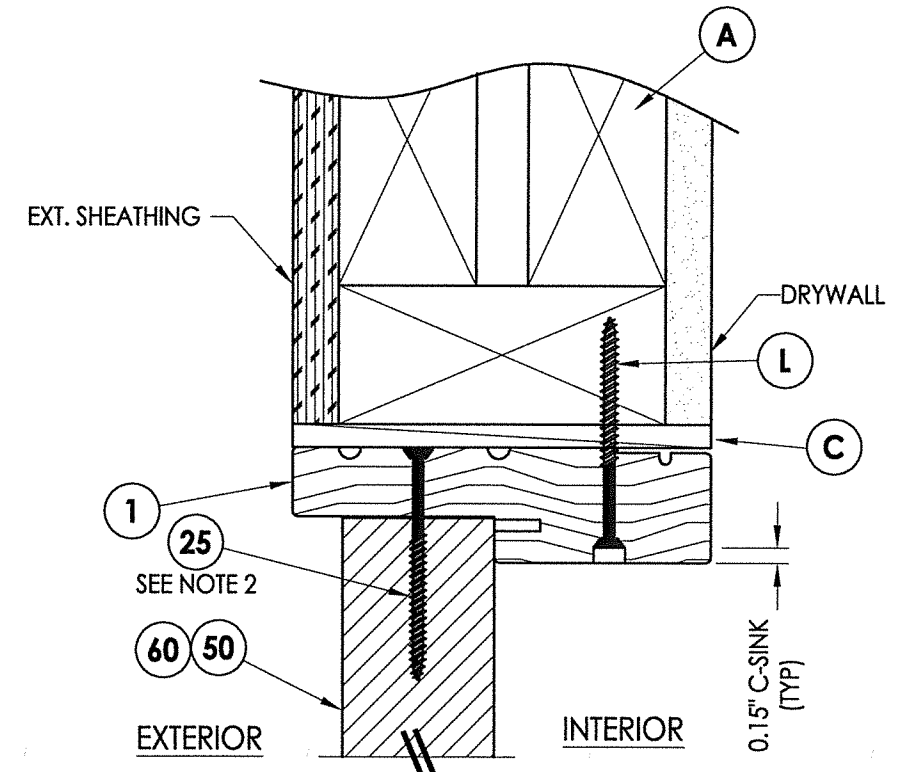
Notes:  
 1. Sidelite assembly screws located 7" from top and 14" from bottom & 2 more screws equally spaced between (4 screws total per side jamb).  
 2. Sidelite assembly screws located 4" from each end (2 screws along head jamb).



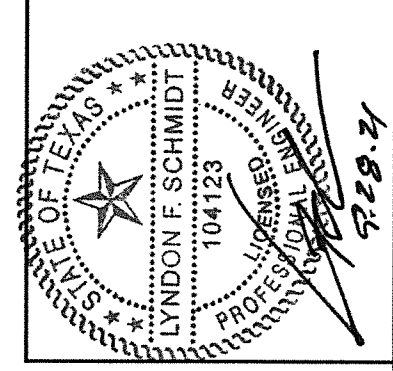
**5 HORIZONTAL CROSS SECTION**  
**5** Outswing shown (Inswing similar)



**6 HORIZONTAL CROSS SECTION**  
**5** Outswing shown (Inswing similar)



**4 VERTICAL CROSS SECTION**  
**5** Shown w/ 2X Buck  
 Outswing shown (Inswing similar)



Documents Prepared By: Lyndon F. Schmidt, P.E.  
 TEXAS P.E. #104123  
 R.W. BUILDING CONSULTANTS, INC.  
 P.O. Box 230 Valrico FL 33595  
 Phone No.: 813.659.9197  
 CERTIFICATE OF REGISTRATION # F-11852

PRODUCT: THERMA-TRU FIBERGLASS DOOR  
 PART OR ASSEMBLY: HORIZONTAL & VERTICAL CROSS SECTIONS

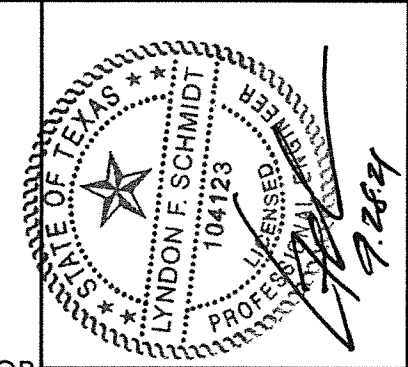
NO.	DATE	REVISIONS	LFS	BY
1	9/28/21	UPDATE TO 2018 IBC/IRC CODE		

DATE: 11/14/17  
 SCALE: N.T.S.  
 DWG. BY: JK  
 CHK. BY: LFS  
 DRAWING NO.: TX-4717  
 SHEET 5 OF 11

Z:\Clients\Therma Tru PERMANENT\B - Texas Dept of Ins\TDI - DR 947 - 68 & 80 Opaque Comp Edge Non-Impact (TX 4716 - 4727)\C - Drawings\TX-4716-18.dwg

**Notes:**

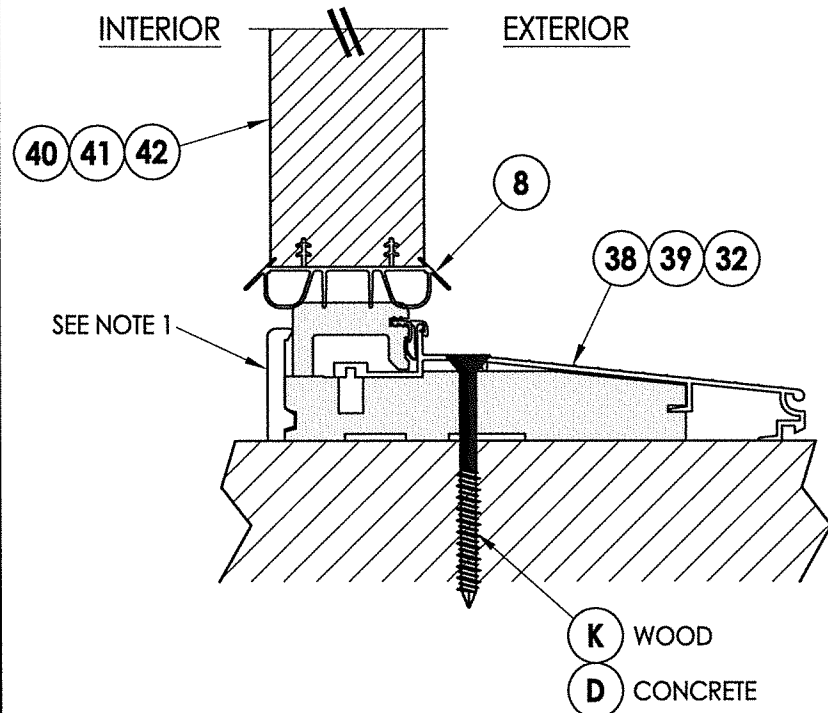
- Sill Item #'s 16, 32, 34, 35, 36, 37, 38 & 39 are attached to jambs w/ (3) #8 X 2-1/2" pfh screws at each end.  
Sill Item #'s 17 & 18 are attached to jambs w/ (2) #8 X 2-1/2" pfh screws at each end.  
Sill Item #15 is attached to jambs utilizing (2) #10 X 2" pph screws at each end.
- Sidelite assembly screws located 4" from each end (2 screws along sill).



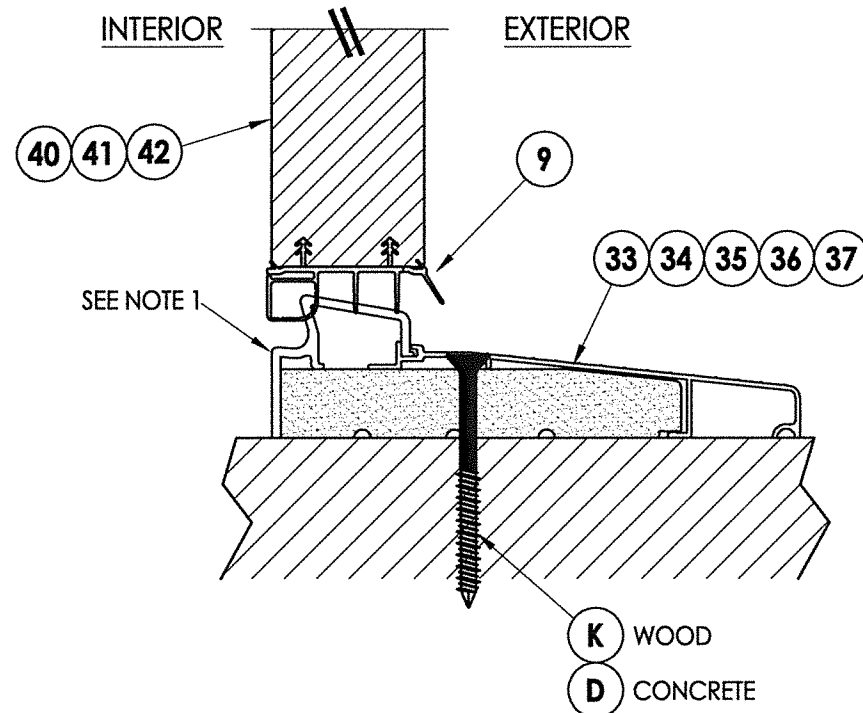
Documents Prepared By: Lyndon F. Schmidt, P.E.  
TEXAS P.E. #104123

RW BUILDING CONSULTANTS, INC.  
P.O. Box 230 Valrico FL 33595  
Phone No.: 813.659.9197

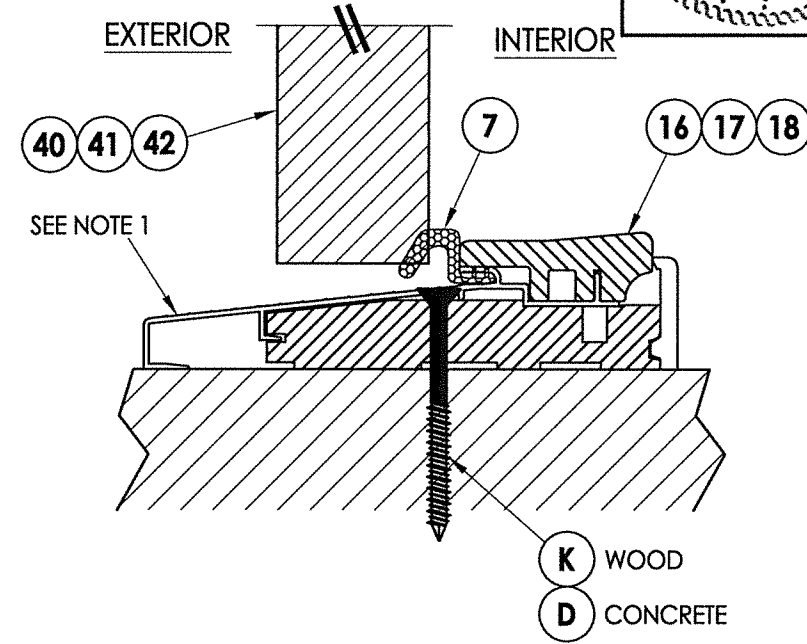
CERTIFICATE OF REGISTRATION # F-11852



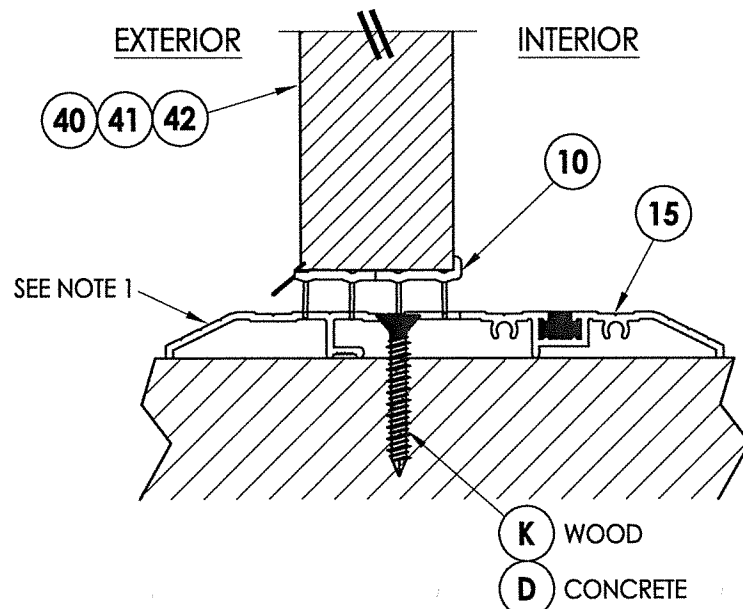
**1 VERTICAL CROSS SECTION**  
6 Inswing Sill



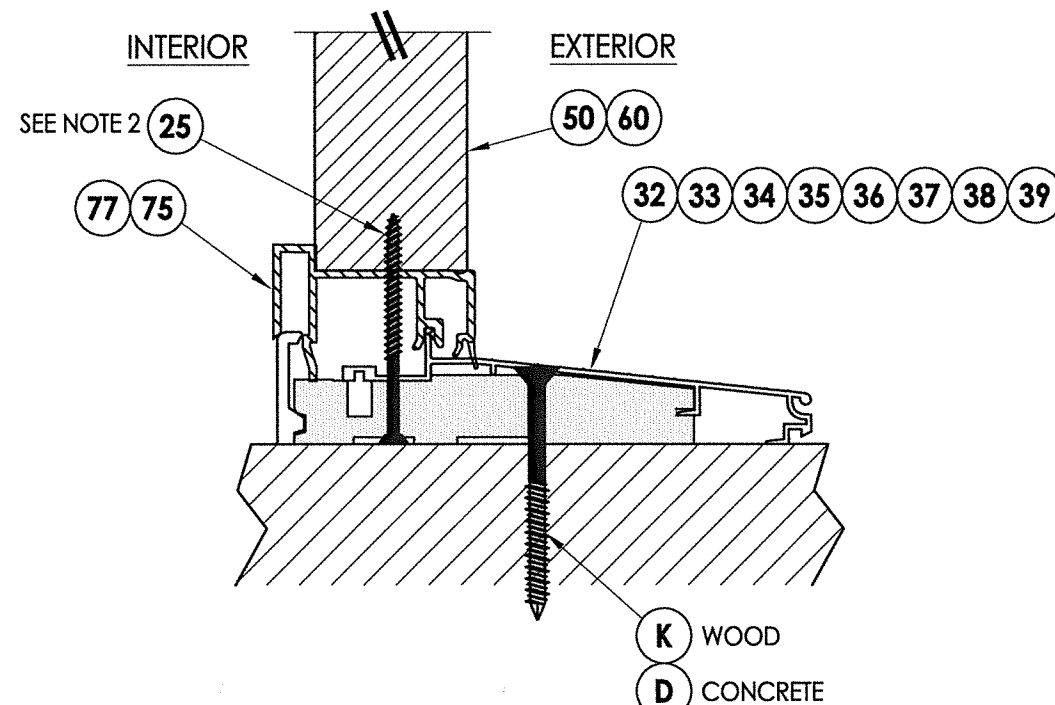
**2 VERTICAL CROSS SECTION**  
6 Inswing Sill



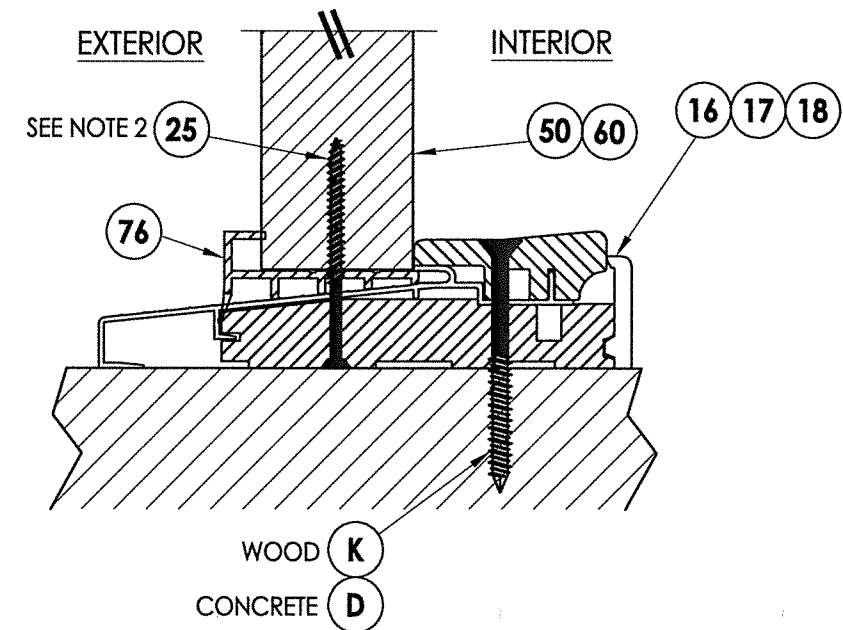
**3 VERTICAL CROSS SECTION**  
6 Outswing Sill



**4 VERTICAL CROSS SECTION**  
6 Public Access Sill



**5 VERTICAL CROSS SECTION**  
6 Inswing Sill



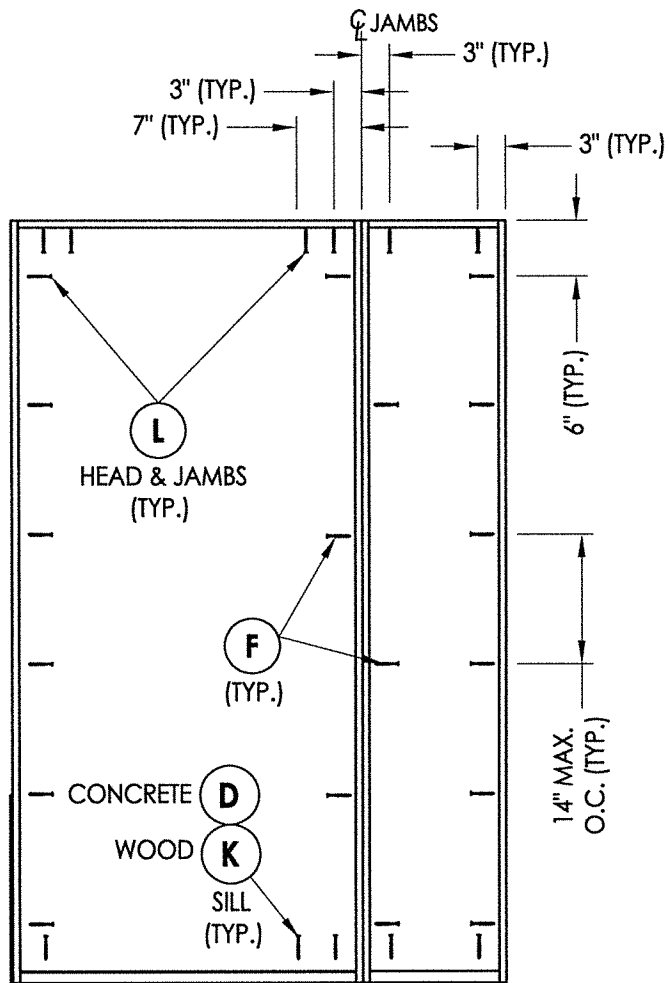
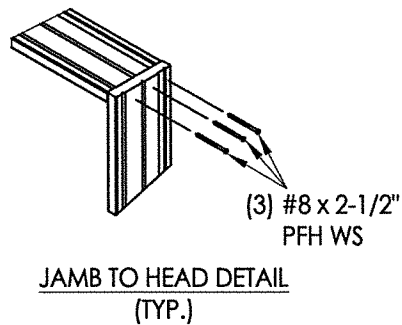
**6 VERTICAL CROSS SECTION**  
6 Outswing Sill

PRODUCT: THERMA-TRU FIBERGLASS DOOR  
PART OR ASSEMBLY: VERTICAL CROSS SECTIONS (THRESHOLDS)

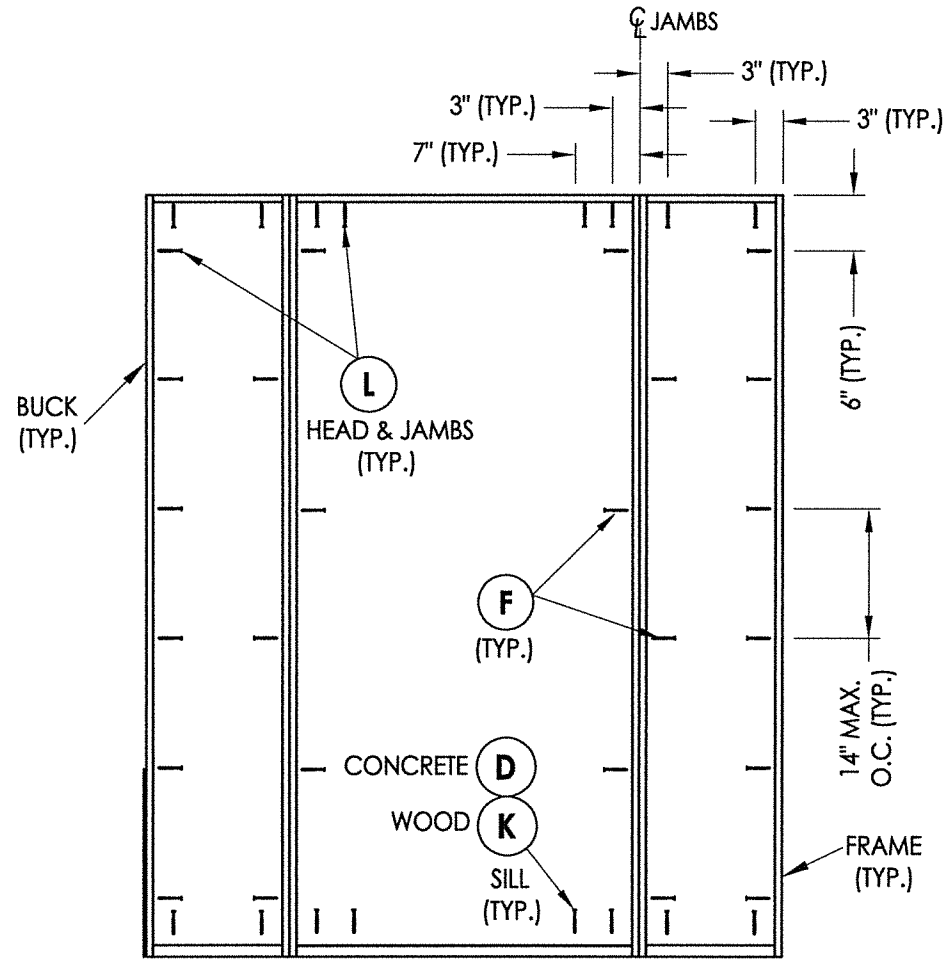
NO.	DATE	DESCRIPTION	BY
1	9/28/21	UPDATE TO 2018 IBC/IRC CODE	LFS

DATE: 11/14/17  
SCALE: N.T.S.  
DWG. BY: JK  
CHK. BY: LFS  
DRAWING NO.: TX-4717  
SHEET 6 OF 11

Z:\Clients\Therma Tru PERMANENT\B - Texas Dept of Ins\TDI - DR 947 - 6'8 & 8'0 Opaque Comp Edge Non-Impact (TX-4716 - 4727)C - Drawings\TX-4716-18.dwg

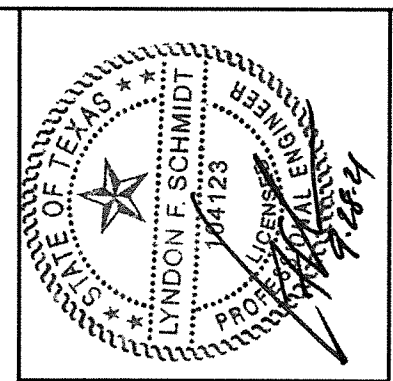


XO/OX



OXO

**FRAME ANCHORING**



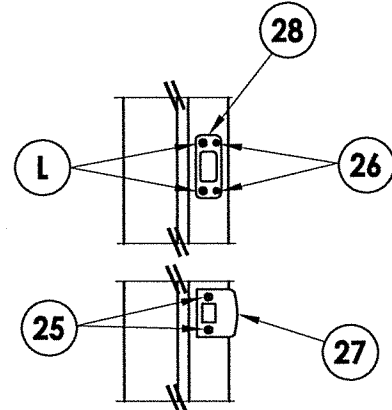
Documents Prepared By: Lyndon F. Schmidt, P.E.  
TEXAS P.E. #104123

**RW** BUILDING CONSULTANTS, INC.  
P.O. Box 230 Valrico FL 33595  
Phone No.: 813.659.9197

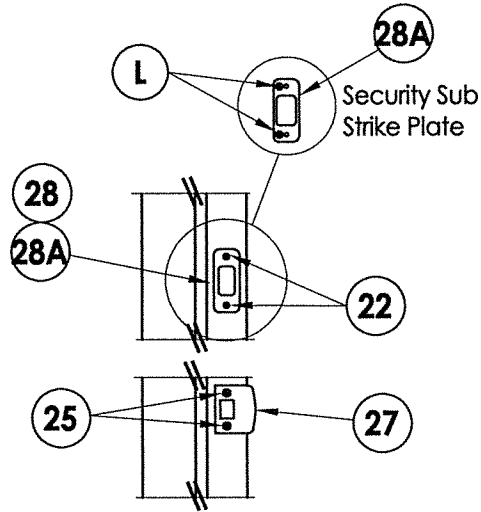
CERTIFICATE OF REGISTRATION # F-11852

PRODUCT:		THERMA-TRU FIBERGLASS DOOR	
PART OR ASSEMBLY:		FRAME ANCHORING	
NO.	DATE	UPDATE TO 2018 IBC/IRC CODE	LFS BY
1	9/28/21		
REVISIONS			
DATE: 11/14/17			
SCALE: N.T.S.			
DWG. BY: JK			
CHK. BY: LFS			
DRAWING NO.: TX-4717			
SHEET 7 OF 11			

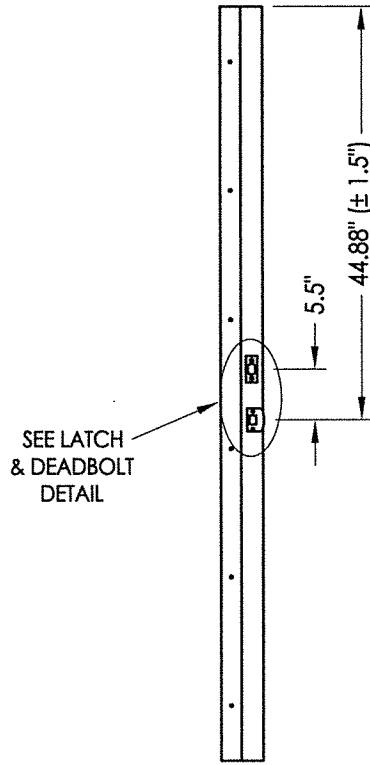
**LATCH & DEADBOLT STRIKE DETAILS**



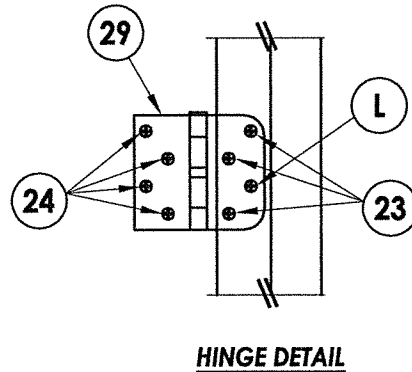
**LATCH & DEADBOLT DETAIL**  
Kwikset



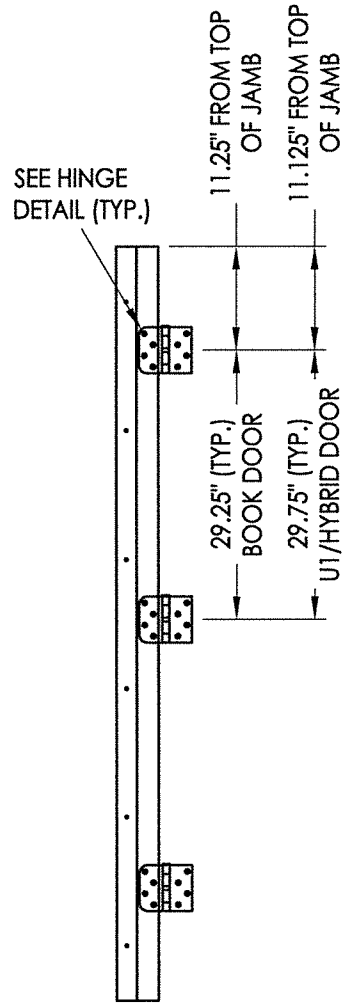
**LATCH & DEADBOLT DETAIL**  
Schlage



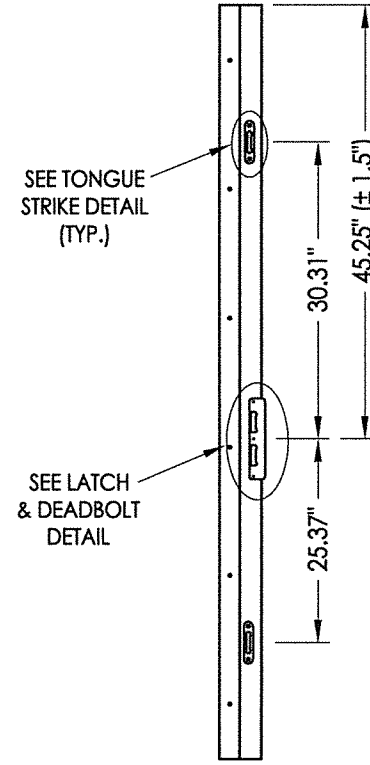
**STRIKE JAMB**  
Latch and Deadbolt



**HINGE DETAIL**

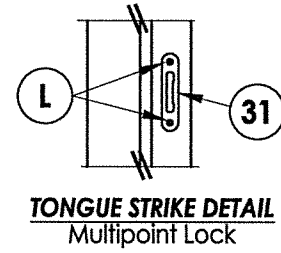


**HINGE JAMB**

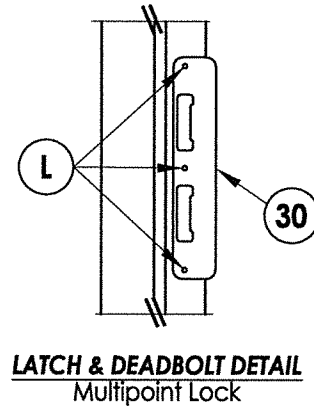


**STRIKE JAMB**  
Multipoint Lock

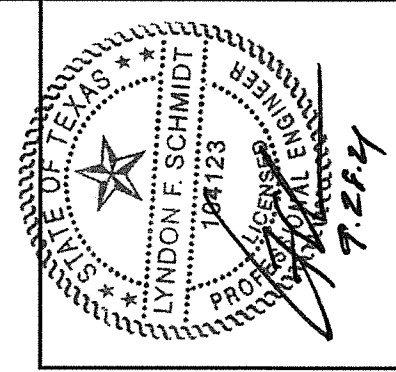
**MULTIPOINT LOCK STRIKE DETAILS**



**TONGUE STRIKE DETAIL**  
Multipoint Lock



**LATCH & DEADBOLT DETAIL**  
Multipoint Lock



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**RW** BUILDING CONSULTANTS, INC.  
P.O. Box 230 Valrico FL 33595  
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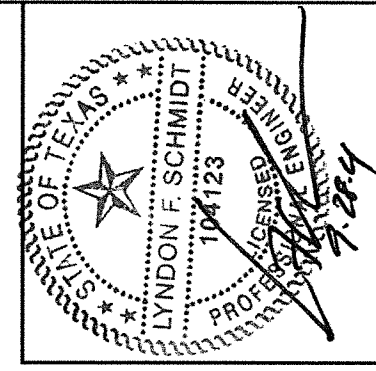
CERTIFICATE OF REGISTRATION # F-11852

PRODUCT: THERMA-TRU FIBERGLASS DOOR  
PART OR ASSEMBLY: HARDWARE DETAILS

NO.	DATE	BY
1	9/28/21	LFS
UPDATE TO 2018 IBC/IRC CODE		

DATE: 11/14/17  
SCALE: N.T.S.  
DWG. BY: JK  
CHK. BY: LFS  
DRAWING NO.: TX-4717  
SHEET 8 OF 11

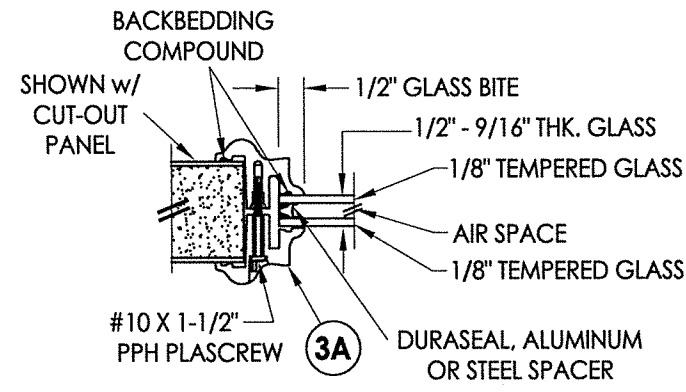




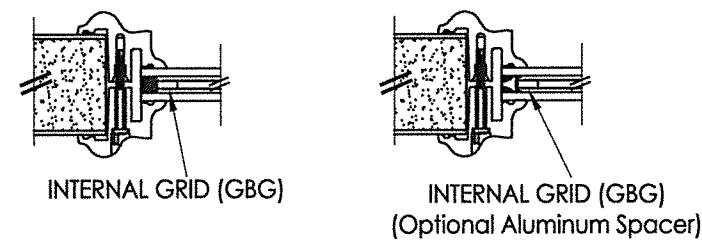
Documents Prepared By: Lyndon F. Schmidt, P.E.  
TEXAS P.E. #104123

**R.W.** BUILDING CONSULTANTS, INC.  
P.O. Box 230 Volrico FL 33595  
Phone No.: 813.659.9197

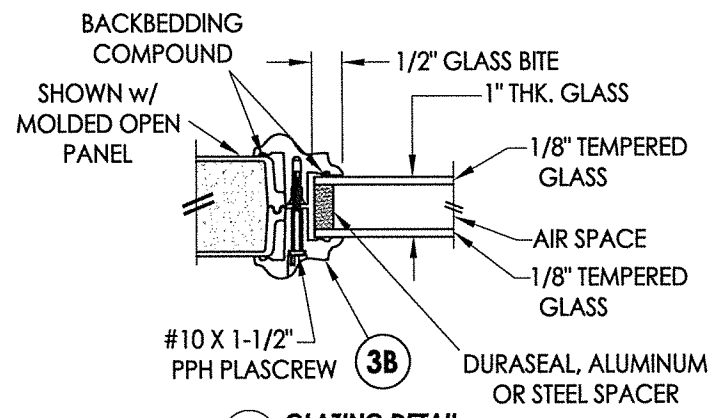
CERTIFICATE OF REGISTRATION # F-11852



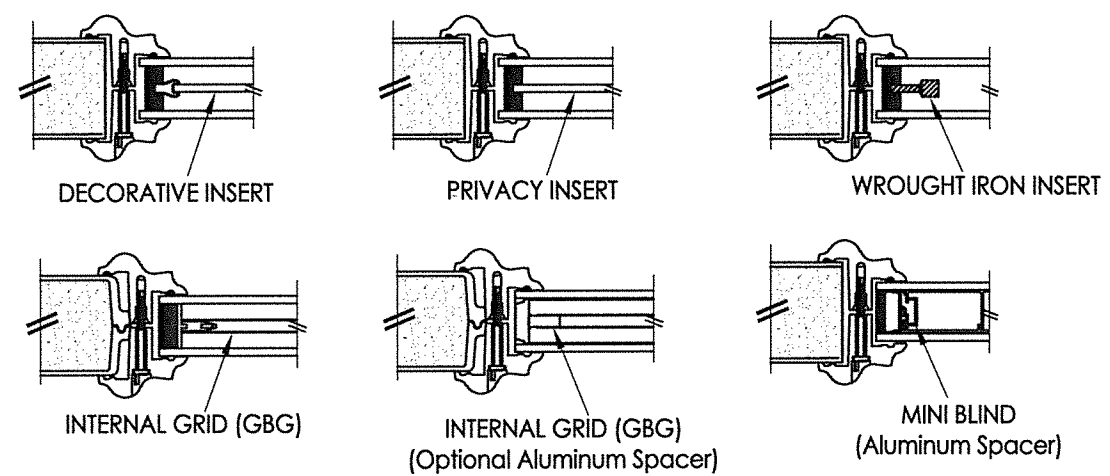
**G1 GLAZING DETAIL**  
BTS Lite Frame  
Sidelites



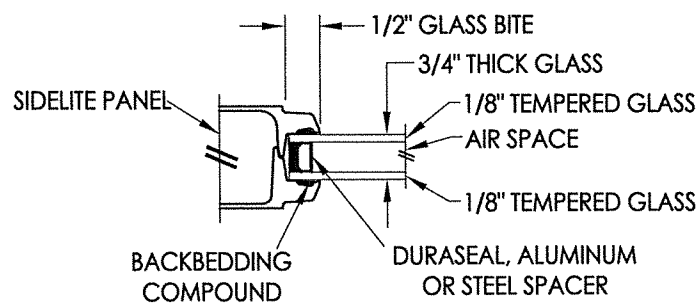
**9/16\"/>**



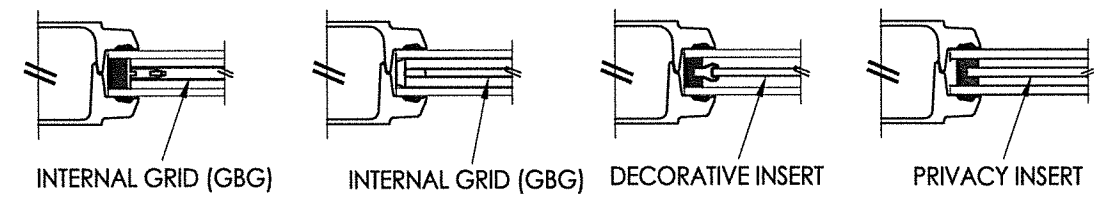
**G2 GLAZING DETAIL**  
BTS Lite Frame  
Sidelites



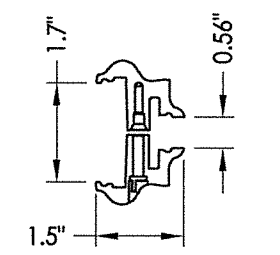
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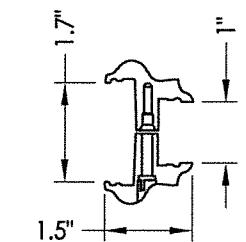
**G3 GLAZING DETAIL**  
Flush Glazing  
Sidelites



**3/4\"/>**

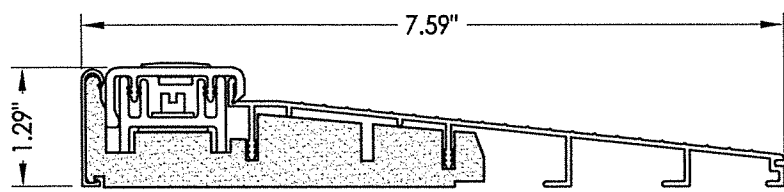


**3A BTS LITE FRAME**  
1/2\"/>

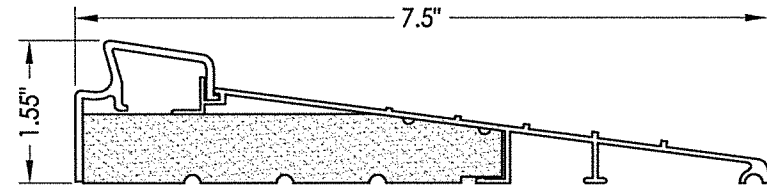


**3B BTS LITE FRAME**  
1\"/>

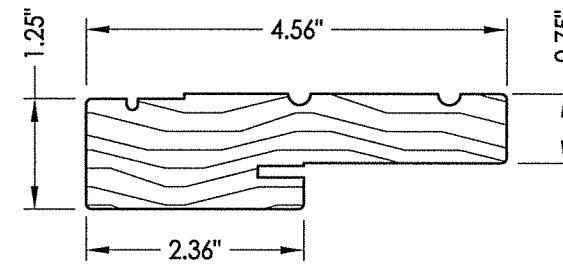
PRODUCT:	Therma-TRU FIBERGLASS DOOR	
PART OR ASSEMBLY:	GLAZING DETAILS	
NO.	DATE	REVISIONS
1	9/28/21	UPDATE TO 2018 IBC/IRC CODE
		LFS
		BY
DATE: 11/14/17		
SCALE: N.T.S.		
DWG. BY: JK		
CHK. BY: LFS		
DRAWING NO.: TX-4717		
SHEET 9 OF 11		



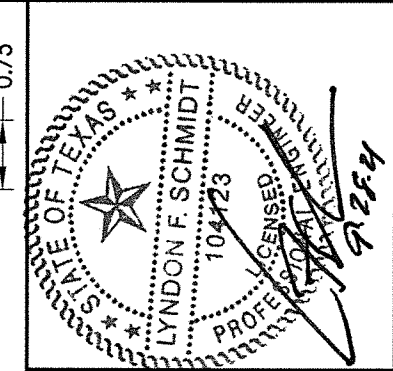
**32 INSWING THRESHOLD**  
Inswing Basic Composite Adjustable Sill 7-1/2"



**37 INSWING THRESHOLD**  
Inswing Basic Fixed 7-1/2" Sill



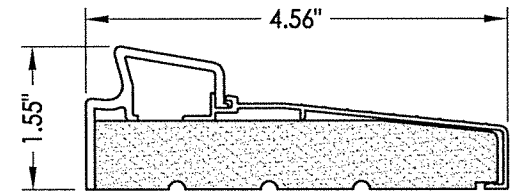
**1 WOOD JAMB**



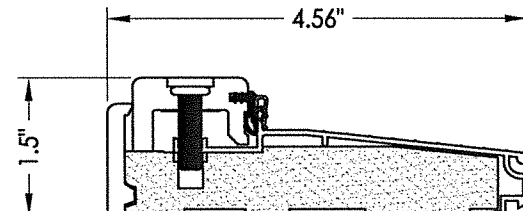
Documents Prepared By: Lyndon F. Schmidt, P.E.  
TEXAS P.E. #104123

**RW** BUILDING CONSULTANTS, INC.  
P.O. Box 230 Valrico FL, 33595  
Phone No.: 813.659.9197

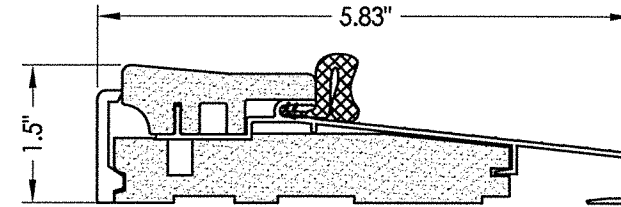
CERTIFICATE OF REGISTRATION # F-11852



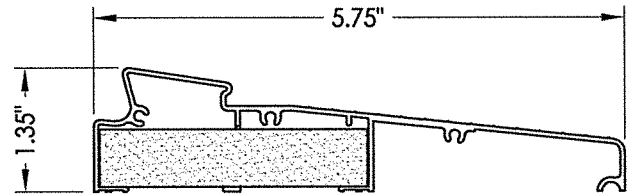
**33 INSWING THRESHOLD**  
Inswing Basic Fixed Sill



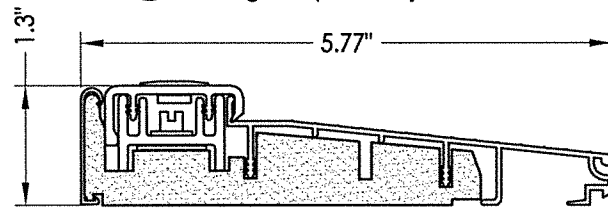
**38 INSWING THRESHOLD**  
Inswing Composite Adjustable Sill



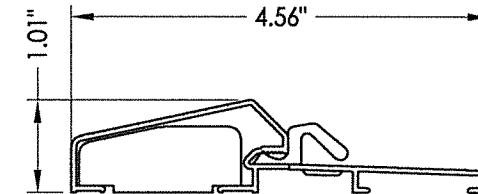
**16 OUTSWING THRESHOLD**  
Composite Sill



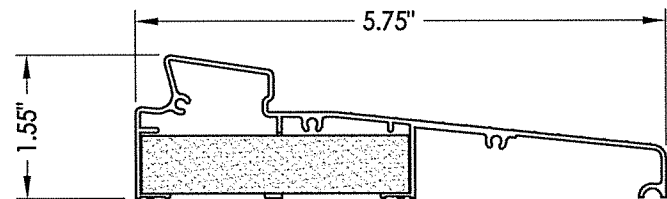
**34 INSWING THRESHOLD**  
Inswing Moderate Climate Sill 1-3/8"



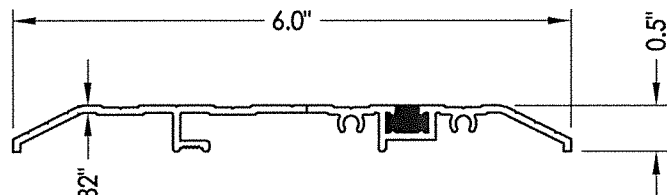
**39 INSWING THRESHOLD**  
Inswing Basic Composite Adjustable Sill



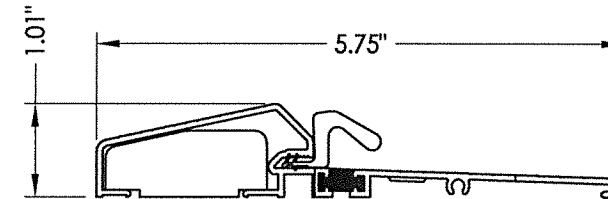
**17 OUTSWING THRESHOLD**  
Composite / Aluminum Sill



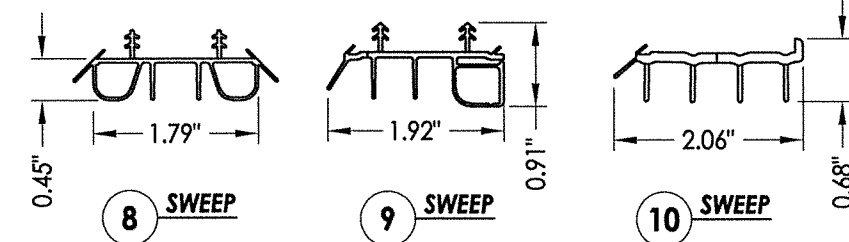
**35 INSWING THRESHOLD**  
Inswing Moderate Climate Sill



**15 PUBLIC ACCESS THRESHOLD**



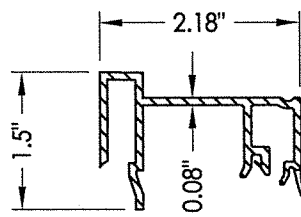
**18 OUTSWING THRESHOLD**  
Composite / Aluminum Sill  
(Thermal Break)



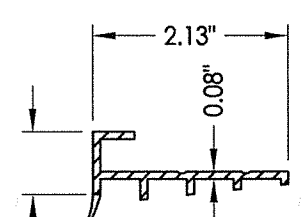
**8 SWEEP**

**9 SWEEP**

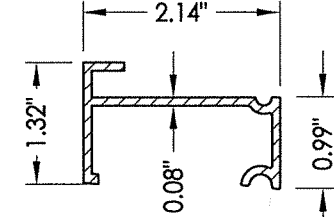
**10 SWEEP**



**75 SIDELITE SPACER**  
Inswing



**76 SIDELITE SPACER**  
Outswing



**77 SIDELITE SPACER**  
Inswing  
Moderate Climate Threshold

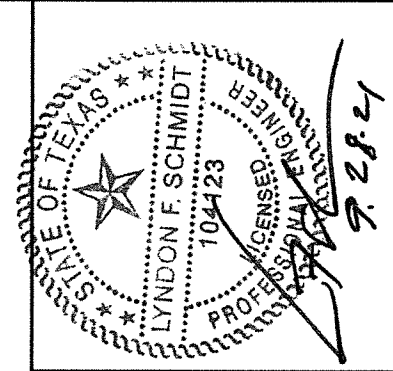
PRODUCT:	THERMA-TRU FIBERGLASS DOOR
PART OR ASSEMBLY:	COMPONENTS

NO.	DATE	BY
1	9/28/21	LFS
UPDATE TO 2018 IBC/IRC CODE		

DATE:	11/14/17
SCALE:	N.T.S.
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.:	TX-4717
SHEET	10 OF 11

**BILL OF MATERIALS**

ITEM #	DESCRIPTION	MATERIAL
A	2X FRAMING (SG >= 0.42)	WOOD
C	1/4" MAX. SHIM SPACE	-
D	1/4" PFH DeWALT OR ITW CONCRETE SCREW (1-3/4" MIN. EMBEDMENT)	STEEL
K	#12 PFH WOOD SCREW (1-1/2" MIN. EMBEDMENT)	STEEL
L	#10 X 2-1/2" PFH WOOD SCREW (1.15" MIN. EMBEDMENT)	STEEL
1	JAMB (FINGER JOINT PINE)	WOOD
6	WEATHERSTRIP (MEDIUM REACH)	FOAM
7	WEATHERSTRIP (LONG REACH)	FOAM
8	SWEEP	VINYL
9	SWEEP (USE w/ MODERATE CLIMATE THRESHOLD)	VINYL
10	SWEEP (USE w/ PUBLIC ACCESS THRESHOLD)	VINYL
15	PUBLIC ACCESS THRESHOLD	ALUM
16	OUTSWING THRESHOLD	ALUM/COMP
17	OUTSWING THRESHOLD	ALUM/COMP
18	OUTSWING THRESHOLD	ALUM/COMP
22	#8 x 3/4" PFH WOOD SCREW	STEEL
23	#10 x 3/4" PFH WOOD SCREW	STEEL
24	#10 x 1" PFH WOOD SCREW	STEEL
25	#8 x 2-1/2" PFH WOOD SCREW	STEEL
26	#8 x 5/8" PFH WOOD SCREW	STEEL
27	LATCH STRIKE PLATE	STEEL
28	DEADBOLT SUB STRIKE PLATE	STEEL
28A	DEADBOLT SUB STRIKE PLATE	STEEL
29	4" X 4" HINGE	STEEL
30	LATCH & DEADBOLT STRIKE PLATE (TONGUE SYSTEM)	ALUM/COMP
31	MULTIPOINT STRIKE PLATE (TONGUE SYSTEM)	ALUM/COMP
32	INSWING THRESHOLD	ALUM/COMP
33	INSWING THRESHOLD	ALUM/COMP
34	INSWING THRESHOLD	ALUM/COMP
35	INSWING THRESHOLD	ALUM/COMP
36	INSWING THRESHOLD	ALUM/COMP
37	INSWING THRESHOLD	ALUM/COMP
38	INSWING THRESHOLD	ALUM/COMP
39	INSWING THRESHOLD	ALUM/COMP
40	DOOR PANEL (BOOK)	-
41	DOOR PANEL (HYBRID)	-
42	DOOR PANEL (U1)	-
50	SIDELITE	-
75	SIDELITE SPACER (INSWING)	PVC
76	SIDELITE SPACER (OUTSWING)	PVC
77	SIDELITE SPACER (INSWING) - MODERATE CLIMATE SILL	PVC



Documents Prepared By: Lyndon F. Schmidt, P.E.  
TEXAS P.E. #104123

**RW** BUILDING CONSULTANTS, INC.  
P.O. Box 230 Vairico FL 33595  
Phone No.: 813.659.9197

CERTIFICATE OF REGISTRATION # F-11852

PRODUCT: THERMA-TRU FIBERGLASS DOOR  
PART OR ASSEMBLY: BILL OF MATERIALS

NO.	DATE	REVISIONS
1	9/28/21	UPDATE TO 2018 IBC/IRC CODE
		LFS
		BY

DATE: 11/14/17  
SCALE: N.T.S.  
DWG. BY: JK  
CHK. BY: LFS  
DRAWING NO.: TX-4717  
SHEET 11 of 11

**CONCRETE ANCHOR NOTES:**

- Concrete anchor locations at the corners may be adjusted to maintain the min. edge distance to mortar joints.
- Concrete anchor locations noted as "MAX. ON CENTER" must be adjusted to maintain the min. edge distance to mortar joints, additional concrete anchors may be required to ensure the "MAX. ON CENTER" dimension are not exceeded.
- Concrete anchor table:

ANCHOR TYPE	ANCHOR SIZE	MIN. EMBEDMENT	MIN. CLEARANCE TO MASONRY EDGE	MIN. CLEARANCE TO ADJACENT ANCHOR
ITW TAPCON®	1/4"	1-3/4"	2"	4"
DeWALT ULTRACON®	1/4"	1-3/4"	1"	4"

**WOOD SCREW INSTALLATION NOTES:**

- Maintain a minimum 5/8" edge distance, 1" end distance, & 1" o.c. spacing of wood screws to prevent the splitting of wood.